

## **FINISHING CENTRE**



# THE MOST ADVANCED HIGH-PERFORMANCE SANDING CENTRE ON THE MARKET

### THE MARKET EXPECTS

the ability to handle orders of different sizes and types, whilst guaranteeing **delivery times and high-quality standards**.

### **BIESSE ANSWERS**

with **technology solutions** that can be customised depending on manufacturing requirements and deliver high product quality without compromising productivity. **Opera 7** is a finishing centre designed for large enterprises which enables processing operations to be performed using high-productivity automatic production systems, ensuring constant quality performance.



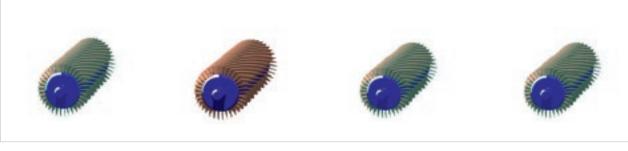
# **OPERA**7

- <sup>r</sup> ULTIMATE MACHINE CUSTOMISATION TO RESPOND TO ALL PRODUCTION NEEDS
- PROCESSING TIME REDUCTION AND MAXIMUM MANUFACTURING EFFICIENCY
- **F EXCEPTIONAL RELIABILITY OF LONG TERM FINISH QUALITY**

# ULTIMATE MACHINE CUSTOMISATION TO RESPOND TO ALL PRODUCTION NEEDS

A comprehensive range of units can be combined and duplicated within the 10 position head, delivering a quality finish for any type of panel which is vastly superior to the usual market standard.





Brite Roller.

Abrasive brush.

Cleaning brush.



X-Spin Plus.



Win units.



HPG knife planner.

Structuring Brush.



Compact cross unit.



Superfinishing pad.



Cross unit.



Pad.



Roller.



# HIGH-TECH SOLUTIONS AVAILABLE FOR ANY PROCESSING OPERATION REQUIREMENT

Soft rollers with a cross-section up to 400 mm combined with pad and Superfinishing Pad groups equipped with patented HP and HP DUO technology for sanding rough, veneered and/or painted panels.







The **Roller unit** is extremely precise and effective. Depending on the hardness of the rubber and the roller's cross-section.The unit can be used to calibrate, sand or finish.

Available cross-section sizes:

240 mm 320 mm 400 mm.

The **Roller unit with HP (High Performance)** technology supports the processing of panels of varying thickness with no need to change the working position. This solution reduces machine set-up times and ensures a homogeneous finish even on batches of panels with different thickness (up to 1.4 mm variation).

## EXCEPTIONAL FINISH QUALITY

#### SANDING CENTRE FOR SANDING HIGHGLOSS PANELS



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Finish and flatness reach optimal qualitylevels, delivering a perfect end product to the customer for subsequent finishing and polishing thanks to the option of combining working units such as the Superfinishing Pad and cross units equipped with HP and HP DUO technology.

# SOLUTIONS FOR CALIBRATION AND BULK REMOVALS.

For calibration operations, the machine can be equipped with 240 or 320 mm stainless steel or 90 sh rubber roller, fitted with 50 Hp motors. The HPG knife unit is available for bulk removal operations. Together with other working units, it ensures maximum material removal and a perfectly flat surface.



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The **HPG unit** is recommended for the calibration of blockboard panels and supports the removal of several millimetres of material in a single run.

# HIGH PERFOR NANCE

# PERFECT SURFACES

The minimum pressure means 100% quality on sanded components.

The High Performance technology of electronic PAD and rollers on Biesse sanding machines, maintains the same sanding pressure, adapting to different surface thicknesses whilst applying a constant abrasive action to ensure optimum surface flatness.



# HIGH-TECHNOLOGY TO ENHANCE MACHINE PERFORMANCE





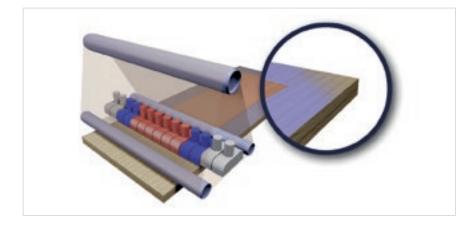
The sectioned **electronic pad** enables users to perform high-quality sanding operations thanks to the electro-pneumatic sensors which are activated on the panel's surface. The vast range of possible adjustments offers specific functionalities for different types of processing operations.



The **electronic pad equipped with HP** (High Performance) technology enhances processing results, both as far as surface flatness and finish are concerned.



The HP system is available in the **DUO** version, which supports the modulation of two operating pressures for any individual sector at a given time. This solution supports the use of two different operating forces on the same panel



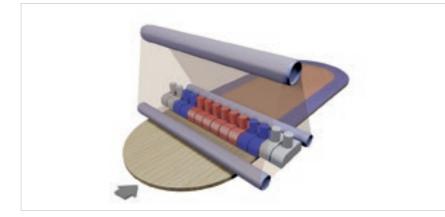
#### 

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#### Save corner

All electric pads, managed by IPC controls, are fitted with the exclusive, patented Save Corner Function. The system limits the sanding time on the corners of the panel, thus preserving the most delicate portions of the panel's surface.



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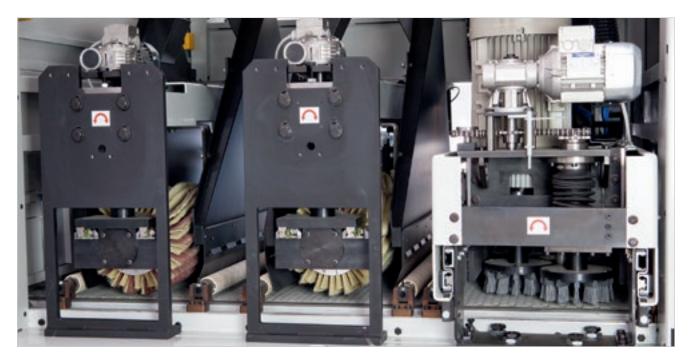
#### Dynamic adaptation.

The HP DUO system supports a dynamic adaptation to individual processing needs and follows perfectly the different shapes of the processed panel.

#### Differentiated reading.

HP DUO pads are equipped with dual input reading to increase resolution and automatically differentiate the pressure on the side edges of the panel.

# EXCEPTIONAL FINISH QUALITY



Opera 7, thanks to the possibility of fitting vertical, longitudinal and Spinbrush units, becomes a genuine modular sanding and brushing centre which supports the full processing cycle for any type of product. Configurations with longitudinal belt tools and brush units within the same machine provide a wide working field even for the most complex components.



The **unit with vertical win brushes** is a vertical rotating brush sanding system. The unit enables customers to sand via a brushing action the profiles and side surfaces, ensuring an even finish. Individual units, equipped with large cross-section brushes (300 or 400 mm), can be adjusted independently as far as side position, angle (-10° +35°) and height.

#### **OPERA**7



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Sturdy and reliable, the **longitudinal brush** is fitted with a cross-sectional oscillation system to provide a uniform finish quality for the end piece, as well as with electronic interference adjustment managed from the control panel. Abrasive strips can be replaced quickly and without the need to remove the unit from the machine. 300 or 400 mm cross-section abrasive brush.



The **X-Spin Plus** unit is the ideal solution for sanding components manufactured with types of woods with different grains: soft material is removed from the wood's grain in a uniform way, also

thanks to the tool's oscillating motion, which ensures an extraordinarily even processing finish. The X-Spin Plus unit's functions include corner-rounding for painted panels, which eliminates any



The **structuring brush** enables the customer to highlight the wood grain of

issues linked to manual handling and the resulting uneven production and system slowdowns.







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processed panels.



# OPTIMAL PANEL CLEANING WITH A GREAT PRICE/ PERFORMANCE RATIO



The **panel cleaning brush** can be fitted with bristles of different materials to respond to the most stringent cleaning requirements for processed panels.

The **anti-static bar** eliminates electrostatic charges on painted panels.



The **rotating blower**, positioned downstream of the machine, enables optimal cleaning of the panel's surface at the end of the sanding cycle.



The **linear blower** is used to finish cleaning the panel's edges. Ideally, it should be coupled with the rotating blower.



Energy Saving System. Biesse, always focussed on energy conservation, provides the E.S.S. Energy Saving System within its product range i.e. a series of accessories aimed at reducing energy consumption.

# MAXIMUM VISIBILITY OF MACHINING OPERATION



The **base** has a one-piece frame in welded steel. The generous thickness of materials used guarantees the stability and durability of the entire structure.



The use of large cross-section **lifting cylinders** makes the structure sturdy, ensuring maximum precision across the bed.



Max. standard work height 200 mm (7.8 inches).

fixed work table 900 mm (35.4 inches). The standard Mobile Head solution supports a standard working height of up to 200 mm, whilst keeping the work table at a height of 900 mm from the ground.

- Ease of component loading/ unloading.
- Ease of line insertion.
- Greater stability.

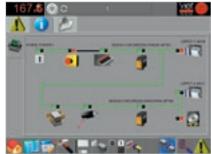
# EASE OF USE AND POWER

**IPC** is a range of **Control systems** which are integrated into the machine via 8" or 15" Touch Screen monitors. This type of control system supports the management of all machine parameters, providing the operator with timely and intuitive information. The industrial PC processor provides control and feedback information to the machine in real time, making it extremely user friendly.



The IPC system is the most comprehensive sanding machine management technology available on the market.







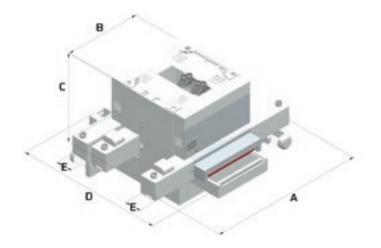
Sectioned pads management.

Alarm checks.

Belt wear.

#### **OPERA**7

# TECHNICAL SPECIFICATIONS



		OPERA 7-2	OPERA 7-3	OPERA 7-4
A 1350-1600-1900	mm/inch	4315/70-4565/179-4865/191	4315/70-4565/179-4865/191	4315/70-4565/179-4865/191
В	mm/inch	2175/86	2175/86	2175/86
C 2620	mm/inch	2445-2645/97-105	2445-2645/97-105	2445-2645/97-105
C 3250	mm/inch	2760-2960/109-117	2760-2960/109-117	2760-2960/109-117
D	mm/inch	2680/106	3100/122	3665/145
E	mm/inch	500/20	500/20	500/20
Maximum operating width	mm/inch	1350/53.1-1600/ 62.9-1900/74.8	1350/53.1-1600/ 62.9-1900/74.8	1350/53.1-1600/ 62.9-1900/74.8
Min-max processing thickness	mm/inch	3-200/ 0.12-7.9	3-200/ 0.12-7.9	3-200/0.1-7.9
Length of longitudinal sanding belts	mm/inch	1380x2620-3250/ 54.3x103.1-128	1380x2620-3250/ 54.3x103.1-128	1380x2620-3250/ 54.3x103.1-128
Size of 5520 cross sanding belts	mm/inch	150x5520/5.9x217.3	150x5520/5.9x217.3	150x5520/5.9x217.3
Size of 7400-8700 c ross sanding belts	mm/inch	150x7400-8700/ 5.9x291.3-342.5	150x7400-8700/ 5.9x291.3-342.5	150x7400-8700/ 5.9x291.3-342.5
Forward speed m/min	m/min	4-20	4-20	4-20
Operating pressure bar	bar	6	6	6
Mass Kg	Kg	5830	7630	8600
Motor power up to Kw (HP)	kW (HP)	37 (50)	37 (50)	37 (50)

The technical specifications and drawings are non-binding. Some photos may show machines equipped with optional features. Biesse Spa reserves the right to carry out modifications without prior notice.

Weighted sound pressure levels at the machine entry operator station: 75.0 dB(A) without load, 76.0 dB(A) with load. Weighted sound pressure levels at the machine exit operator station: 70.5 dB(A) without load, 71.0 dB(A) with load. Viet Srl. designed the machine to reduce airborne noise emission at source to the lowest possible level, in accordance with the requirements of Community Directive 2006/42/EC, and commissioned a test to determine the sound pressure emission level at the operator station for the smoothing/sanding machine.

Standards: The measurement was carried out in compliance with UNI EN ISO 19085-8:2018, UNI EN ISO 11202:2010. The noise levels shown are emission levels and do not necessarily correspond to safe operation levels. Even though there is a relation between emission levels and exposure levels, this cannot be used reliably to establish whether further precautions are necessary. The factors determining the noise levels to which the operative personnel are exposed include the length of exposure, the characteristics of the work area, as well as other sources of dust and noise, etc. (i.e. the number of machines and processes concurrently operating in the vicinity). In any case, the information supplied will help the user of the machine to better assess the danger and risks involved.

# MANAGING PRODUCTION IN A SIMPLE, USER-FRIENDLY MANNER







SMARTCONNECTION IS A SOFTWARE PACKAGE FOR MANAGING JOB ORDERS WITHIN THE COMPANY - FROM THE GENERATION PHASE TO SCHEDULING AND PRODUCTION START-UP - IN JUST A FEW SIMPLE, INTUITIVE STEPS.

THANKS TO SMARTCONNECTION, PRODUCTION SITE MACHINES CAN BE LINKED UP TO TRANSFORM THE COMPANY INTO A 4.0 ENTITY..



SmartConnection is a web-based solution that can be used by any device.

MANAGE THE JOB ORDER

**PLAN** 



WORK



# MADE WITH BIESSE

# LA SINGLE SOLUTION FOR SANDING AND PROFILING

Alpilegno, a Leader in the sector of high-quality, high-performance windows and doors, performs sanding operations followed by profiling operations in its Val di Ledro (TN) manufacturing unit. Loris Cellana, an entrepreneur with long-standing experience in this sector, recalls how he evaluated machinery and system suppliers for over two years to find one that could guarantee a cutting-edge finished product: "In the end I chose Biesse". The core of the new manufacturing line is a Uniwin machine, combined with a modern 5-axis Rover C that produces doors.

"I think that Uniwin is already a good profiling machine in itself, but what was equally important to me was its interaction with other line components, such as the planer, the sanding machine and the press, and the material flow between the various machines". Components are custom-cut and stored in a loading device by Biesse's automation programme that feeds the automatic planer. A conveyor belt moves the work pieces from the planer to the sanding machine, a Viet Narrow 334 Bottom also supplied by Biesse. From there, the components are sent to the Uniwin's loader, from which they are picked to be fully processed. 72, 80, 92 and 104 mm thicknesses in wood and wood-aluminium are processed. The magazines house up to 98 tools that are always available. Such tools can be changed in real time during machine operation thanks to a chain-operated tool-changer.

"Assembly precision enables us to avoid having to remove glue residues from the frame", explains Cellana: "in this way, surface calibration and sanding must be arranged the one after the other, to go to the pressing stage immediately after profiling". Moreover, individual components are not painted before they are pressed, as it is customary. As a matter of fact, Cellana paints the entire frame. The compact production line occupies a footprint of only 15x15 metres; components are always handled forward and backward from the planing to the profiling machine, leaving enough space also for a walkway. "I like Biesse's solution: it is compact, the machines are efficient and, since they all come from the same supplier, it is easy to learn how to operate them", explains a visibly satisfied Cellana.

Source: Holzkurier Austrian magazine/special Nurenberg Exhibition issue.



# CUSTOMER CARE IS WHO WE ARE

SERVICES is a new experience for our customers, to offer not just excellent technology but the added value of an increasingly direct connection with the company, the professionals who work there and the experience they embody.



#### ADVANCED DIAGNOSTICS

Digital channels for remote interaction online 24/7. Always ready to intervene on-site seven days a week.



#### A WORLDWIDE NETWORK

39 branch offices, over 300 certified agents, retailers in 120 countries, and spare parts warehouses in America, Europe and the Far East.



#### SPARE PARTS AVAILABLE IMMEDIATELY

Identification, shipping and delivery of spare parts for every need.



#### **EVOLVED TRAINING OPPORTUNITIES**

Lots of on-site, online and classroom training modules for personalised growth.

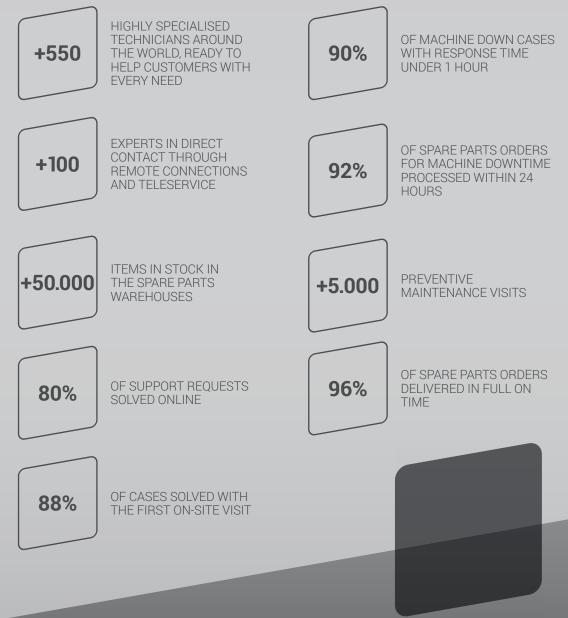


#### VALUABLE SERVICES

A wide range of services and software packages to help our customers achieve continuous improvements in performance.

#### **SERVICES**





Founded in Italy, international native.

# We simplify yo manufacturing to make the po of any materia



We are an international company that manufactures integrated lines and machines to process wood, glass, stone, plastic and composite materials and what will come next.

Thanks to our rooted competence nurtured by an ever-growing worldwide network, we support your business evolution – empowering your imagination.

Master of materials, since 1969.

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Join the Biesse world.



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